

1. Apparatus for applying an ultrasound treatment to a portion of a human body, such apparatus comprising:
means for applying ultrasound energy for the ultrasound treatment to the portion;

means adapted to be disposed on the portion for providing a color change only at a predetermined temperature when a dosage limit of the ultrasound treatment has been reached; and

means adapted to secure the means for indicating to the portion of the human body.

2. The apparatus for applying an ultrasound treatment as in claim 1 further comprising an ultrasonic source.

3. The apparatus for applying an ultrasound treatment as in claim 1 further comprising an ultrasonic transducer coupled to the ultrasonic source.

4. Apparatus for applying an ultrasound treatment to a portion of a human body, such apparatus comprising:

an ultrasound transducer adapted to apply the ultrasound treatment to the portion of the human body;

a thermochromatic strip adapted to be disposed on the portion and adapted to reveal a dosage reached message ^{only} at a predetermined temperature when a dosage limit of the ultrasound treatment has been reached; and

means adapted to secure the thermochromatic strip to the portion of the human body.

5. The apparatus for applying an ultrasound treatment as in claim 4 wherein the means for securing further comprise

RECEIVED
JUL 26 2001
TECHNOLOGY CENTER R3700

and adhesive disposed on a surface of the thermochromatic strip.

6. The apparatus for applying an ultrasound treatment as in claim 4 further comprising an ultrasonic source.

7. The apparatus for applying an ultrasound treatment as in claim 4 further comprising an ultrasonic transducer coupled to the ultrasonic source.

~~8.~~ ⁹ A method of applying an ultrasound treatment to a portion of a human body, such method comprising the steps of:

B1
determining a temperature rise which the body portion will experience when a dosage limit of the ultrasound treatment has been reached;

disposing on a surface of the body portion an indicator adapted to provide a visual change only at the determined temperature;

applying ultrasound to the body portion until the indicator provides the visual change at the determined temperature.

¹⁰
~~9.~~ The method of determining when a dosage limit has been reached as in claim ~~8~~ ⁹ wherein the step of determining a temperature rise further comprises determining an ultrasound penetration depth to be achieved for the body portion.

¹¹
~~10.~~ The method of determining when a dosage limit has been reached as in claim ~~9~~ ⁹ wherein the step of determining an ultrasound penetration depth to be achieved for the body

portion further comprises selecting a frequency of the ultrasound source to achieve the ultrasound penetration depth.

¹²~~11~~. The method of determining when a dosage limit has been reached as in claim 8 wherein the step of selecting a frequency of the ultrasound heating source further comprises determining an average depth of penetration of the ultrasound for the selected frequency.

¹³~~12~~. Apparatus for applying an ultrasound treatment to a portion of a human body, such apparatus comprising:
means adapted to be disposed on a surface of the portion for providing an opacity change only when a dosage limit of the ultrasound treatment has been reached;
means for applying ultrasound to the body portion until the means for providing indicates that the dosage limit has been reached.

¹⁴~~13~~. The apparatus for applying as in claim ¹³~~12~~ wherein the means for applying ultrasound further comprises means for controlling an ultrasound penetration depth to be achieved for the body portion.

¹⁵~~14~~. The apparatus for applying as in claim ¹³~~12~~ wherein the means for providing the opacity change further comprises a thermochromatic strip.

¹⁶~~15~~. The apparatus for applying as in claim ¹⁵~~14~~ wherein the thermochromatic strip further comprises a relatively thin plastic sandwich.

¹⁶
17 ~~16~~. The apparatus for applying as in claim ~~15~~ wherein the plastic sandwich further comprises a colored background.

¹⁷
18 ~~17~~. The apparatus for applying as in claim ~~16~~ wherein the colored background further comprises alpha-numeric characters.

⁸
B¹ ~~18~~. The apparatus for applying an ultrasound treatment as in claim 4 wherein the thermochromatic strip further comprises a tab color-coded with the predetermined temperature.
